

CLAIMS

We Claim:

- Sub B1
- 1 1. A method of transferring data across a computer
2 network, said computer network including a plurality
3 of computers, a database stored on one of said
4 plurality of computers, said method comprising the
5 steps of:
6 setting data transfer constraints;
7 requesting transfer of data stored on a remote
8 computer system;
9 identifying at least one object included in
10 said requested data as being associated with a
11 generic object; and
12 substituting the generic object for each of
13 said at least one object responsive to said data
14 transfer constraints.
 - 1 2. A method as in claim 1 wherein said stored data
2 includes image and sound data.
 - 1 3. A method as in claim 2, wherein image data is
2 requested by a user for display on a web browser,
3 said generic object being substituted in a web
4 browser image, said method further comprising:
5 displaying said web browser image.
 - 1 4. A method as in claim 3, wherein the remote
2 computer system identifies generic objects.
 - 1 5. A method as in claim 4, wherein while the web
2 browser image is being displayed, the remote

3 computer system is transferring generic object codes
4 associated with related images.

1 ~~6. A method as in claim 5 wherein when related~~
2 ~~images are displayed, said generic objects~~
3 ~~associated with said transferred generic object~~
4 ~~codes are substituted in said displayed related~~
5 ~~images.~~

1 ~~7. A method as in claim 6 wherein a requested~~
2 ~~object is transferred while a corresponding generic~~
3 ~~object is being displayed and further comprising:~~
4 ~~replacing and displaying each corresponding~~
5 ~~generic object with each said requested object when~~
6 ~~said requested object is received.~~

1 ~~8. A method as in claim 7, wherein the data~~
2 ~~transfer constraints include a peak net traffic~~
3 ~~constraint, a client quick mode constraint, a server~~
4 ~~quick mode constraint and an importance level.~~

1 ~~9. A method as in claim 8, wherein when said~~
2 ~~importance level is high, data is transferred from~~
3 ~~said database and the web browser image is displayed~~
4 ~~normally.~~

1 ~~10. A method as in claim 8, wherein when peak net~~
2 ~~traffic is below said peak net traffic constraint,~~
3 ~~data is transferred from said database and the web~~
4 ~~browser image is displayed normally.~~

1 11. A method as in claim 8, wherein when said
2 client quick mode constraint is not selected, data
3 is transferred from said database and the web
4 browser image is displayed normally.

1 12. A method as in claim 8, wherein when said
2 server quick mode constraint is not selected, data
3 is transferred from said database and the web
4 browser image is displayed normally.

1 13. A method as in claim 5, wherein while the web
2 browser image is being displayed, the remote
3 computer system is further transferring additional
4 generic objects associated with said related images.

1 14. An interface device for connecting to and
2 retrieving data from a remote computer system, said
3 interface device comprising:
4 means for setting data transfer constraints;
5 means for requesting data from a remote
6 computer system;
7 means for storing a plurality of generic
8 objects, each stored generic object corresponding to
9 an original object in data requested from said
10 remote computer system;
11 means for substituting each stored said generic
12 objects for said corresponding object; and
13 means for outputting said requested data, said
14 output data selectively including said generic
15 objects or corresponding original objects responsive
16 to said data transfer constraints.

1 15. The interface device as in claim 14, wherein
2 the outputting means is a video display.

1 16. The interface device as in claim 14, wherein
2 the interface device is a speaker.

1 17. A method of compressing digital images,
2 comprising the steps of:

- 3 a) identifying objects in a digital image;
4 b) identifying names of identified objects;
5 c) identifying a position of identified
6 objects;
7 d) identifying a position relative to one of
8 said identified objects in the digital image;
9 e) identifying characteristics of the
10 identified objects;
11 f) replacing identified objects with generic
12 objects, position data and characteristics; and,
13 g) sending the modified digital image to a
14 client system for display.

1 18. A method of restoring a compressed image
2 comprising the steps of: a) identifying
3 generic objects in received image data;
4 b) identifying corresponding objects in
5 subsequently received data;
6 c) replacing said identified generic objects
7 with said corresponding objects; and
8 d) displaying said image.

1 19. A computer program product for transferring
2 data across a computer network, said computer

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3 network including a plurality of computers, a
4 database stored on one of said plurality of
5 computers, said computer readable program code
6 comprising:
7 computer readable program code means for
8 setting data transfer constraints;
9 computer readable program code means for
10 requesting transfer of data stored on a remote
11 computer system;
12 computer readable program code means for
13 identifying at least one object included in said
14 requested data as being associated with a generic
15 object; and
16 computer readable program code means for
17 substituting the generic object for each of said at
18 least one object responsive to said data transfer
19 constraints.

Sub B5

1 20. A computer program product as in claim 19,
2 wherein image data is requested by a user for
3 display on a web browser, said generic object being
4 substituted in a web browser image, said computer
5 program product further comprising:

6 computer readable program code including a
7 database with a plurality of generic objects.

1 21. A computer program product as in claim 20,
2 further comprising:

3 computer readable program code for transferring
4 additional generic objects associated with related
5 images while the web browser image is being
6 displayed.

1 22. A computer program product as in claim 21,
2 further comprising:
3 computer readable program code for substituting
4 said additional objects for said related object when
5 a related image is displayed.

1 23. A computer program product as in claim 20,
2 further comprising:
3 computer readable program code for transferring
4 requested object while a corresponding generic
5 object is being displayed and when said requested
6 object is received. replacing and displaying each
7 corresponding generic object with each said
8 requested object.